

Amendment
Serial No. 10/630,716
Attorney Docket No. 030860

AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Claims 1-4. (Cancelled)

5. (Currently Amended) A semiconductor device ~~according to claim 1 comprising:~~

a semiconductor element formed over a surface of a semiconductor substrate;

a first insulating film formed over the surface of the semiconductor substrate, the first insulating film covering the semiconductor element, and a top surface of the first insulating film being planarized;

a second insulating film formed over the first insulating film, the second insulating film having a dielectric constant lower than a dielectric constant of the first insulating film;

a first wiring pattern formed over the second insulating film; and

a conductive connection member buried in the second and first insulating films, the conductive connection member electrically interconnecting the first wiring pattern and the semiconductor element,

wherein [[:]] a surface modifying layer formed by using silane coupler or metal coupler is formed on an upper surface of the second insulating film;

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the semiconductor device further comprises a third insulating film formed on the surface modifying layer and having a dielectric constant lower than the dielectric constant of the first insulating film; and the first wiring pattern is buried in a trench whose bottom is defined by the surface modifying layer, the trench being formed in the third insulating film.

6. (Currently Amended) A semiconductor device according to claim 2 comprising:

a semiconductor element formed over a surface of a semiconductor substrate;

a first insulating film formed over the surface of the semiconductor substrate, the first insulating film covering the semiconductor element, and a top surface of the first insulating film being planarized;

a second insulating film formed over the first insulating film, the second insulating film having a dielectric constant lower than a dielectric constant of the first insulating film;

a first wiring pattern formed over the second insulating film;

a conductive connection member buried in the second and first insulating films, the conductive connection member electrically interconnecting the first wiring pattern and the semiconductor element; and

multilevel wiring patterns formed over the first wiring pattern, wherein the first wiring pattern and the multilevel wiring patterns are made of metal, and the first wiring pattern is disposed in a lowest level among wiring patterns made of metal, wherein

a surface modifying layer formed by using silane coupler or metal coupler is formed on an upper surface of the second insulating film;

the semiconductor device further comprises a third insulating film formed on the surface modifying layer and having a dielectric constant lower than the dielectric constant of the first insulating film; and

the first wiring pattern is buried in a trench whose bottom is defined by the surface modifying layer, the trench being formed in the third insulating film.

7. (Previously Presented) A semiconductor device according to claim 3 comprising:

a semiconductor element formed over a surface of a semiconductor substrate;

a first insulating film formed over the surface of the semiconductor substrate, the first insulating film covering the semiconductor element, and a top surface of the first insulating film being planarized;

a second insulating film formed over the first insulating film, the second insulating film having a dielectric constant lower than a dielectric constant of the first insulating film;

a first wiring pattern formed over the second insulating film; and

a conductive connection member buried in the second and first insulating films, the conductive connection member electrically interconnecting the first wiring pattern and the semiconductor element

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wherein the second insulating film is made of organic insulating material or porous silica;

wherein a surface modifying layer formed by using silane coupler or metal coupler is formed on an upper surface of the second insulating film;

the semiconductor device further comprises a third insulating film formed on the surface modifying layer and having a dielectric constant lower than the dielectric constant of the first insulating film; and

the first wiring pattern is buried in a trench whose bottom is defined by the surface modifying layer, the trench being formed in the third insulating film.

Claims 8-10 (Cancelled).